#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES
Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary Report No: WIR-014366

Address: 333 Burma Road Date Inspected: 19-May-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

Bridge No: 34-0006 Component: OBG

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

**OBG** Assembly Yard

8BW+8CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 001 located at OBW8A counter weight side of segment. Welder is identified as Mr. Li Xiaojie (067904). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2213-B-U2-FCM-1.

Flux Core Arc Welding (FCAW) welding was performed on weld joint 001 located at OBW8A cross beam side of segment. Welder is identified as Mr. Li Xiaolin (067079). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-1G (1F) Repair-1 and WR12932 repair procedure.

8AW+8BW

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 001 located at OBW8 cross beam side of segment. Welder is identified as Mr. Gong Huaigang (037840). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-Repair-1 and WR12926 repair procedure.

Y Location of repairs areas by above noted welder (037840) is located at 1550 and 1600mm. (External)

8BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 011 located at SEG045A counter weight side of segment. Welder is identified as Mr. Zai Dawei (068097). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2214-B-U2-FCM-1.

8CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 048 located at SEG047B counter weight side of segment. Welder is identified as Mr. Zai Dawei (068097). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2214-B-U2-FCM-1.

7DW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 047 located at SEG039\* cross beam side of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 procedure.

Y Location of repairs areas by above noted welder (045196) is located at 15 and 425mm. (External)

Travel Rail Brackets

Flux Core Arc Welding (FCAW) welding was performed on weld joint 002 located at TR2A-PP048 for counter weight side of segment 7AW. Welder is identified as Mr. Ge Hao (201583). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132-Tc-U4b-F.

Flux Core Arc Welding (FCAW) welding was performed on weld joint 002 located at TR2A-PP050 for counter weight side of segment 7BW. Welder is identified as Mr. Bi Lai Shu (045280). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132-Tc-U4b-F.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Tail Assembly Yard. Locations and

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

description of work are as followed:

7DE

1. Heat straightening was performed on the deck plate 495 (weld joints DP495-001-003, 004, 006) at panel point 57 per HSR (B)-365.

8AW

This QA Inspector observed ZPMC personnel had cut damaged area FL2-2 web to bottom plate. This QA Inspector noted ZPMC had deviated from repair procedure. Repair plate member corners did not have the proper radius (50mm) per RFI-GGL-MQ-1573. This QA Inspector issued an incident report for noted issue on today's work shift.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer